

Appl. No. 10/034,296
Amtdt. dated May 10, 2005
Reply to Office Action of February 10, 2005

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REMARKS/ARGUMENTS

Telephonic Interview

Applicants express their thanks for the courtesy of a telephonic interview on 5 May 2005 between Examiner J. Boyd, Poongs Muthukumaran (representative of the assignee at interest), and the undersigned. This description of the interview is intended to also be responsive to the Examiner Interview Summary believed to have been dated 5 May 2005.

During the interview, the undersigned pointed out how the subject matter of the Frank et al. document (US2003/0077438) is distinct from the subject matter of the claimed invention. In particular, the Frank et al. disclosure is directed to compositions comprising particles, a binder material, and fibers where the binder material serves to join the various components of the compositions (see page 3, paragraphs 0036 and 0037). While the particles are described as possibly "monolithic" in that they are composed of homogeneously aerogel material (see page 2, paragraph 0032), the binder material is described as being various non-aerogel materials (see page 3, paragraphs 0038 to 0040). Thus Frank et al.'s disclosure is directed to aggregates of particles and fibers that are held together by binder.

Compared to the instant invention, Frank et al. do not describe "monolithic" aerogel materials that contain a "lofty fibrous batting". Simply put, Frank et al. fail to disclose or suggest an aerogel monolith material that contains anything like "lofty fibrous batting" as encompassed by the claims because the individual particles of Frank et al.'s aggregates do not contain any fibers. It is only the binder containing aggregates of particles that may contain fibers joined to the particles via the binder. Thus Frank et al.'s composition, even if it contains "monolithic" aerogel particles that are joined by a binder to other particles and fibers, is very different from the claimed aerogel monolithic containing lofty fibrous batting.

Examiner Boyd indicated her understanding of Applicants' position as described above and agreed that the disclosure of Frank et al. appeared distinct from the claimed invention. The undersigned then indicated that a response based in part on this position would be filed shortly.

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Rejections under 35 U.S.C. § 102 and 103(a)

Claims 1-4, 7-8, 11, 19, 21-25, and 26 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by Frank et al. (US 2003/0077438).

Applicants have carefully reviewed the statement of the rejection as well as the cited reference and respectfully incorporate the arguments presented during the telephonic interview as described above. Accordingly, Applicants respectfully submit that no *prima facie* case of anticipation has been presented.

Simply put, and as explained above, Frank et al. do not teach or suggest an aerogel monolith containing lofty fibrous batting as encompassed by the claims. Instead, Frank et al. describe compositions composed of aggregates of particles, binder, and fibers. The Frank et al. particles, even if composed of aerogel material, do not contain any fibers. Instead, it is Frank et al.'s aggregates of particles, joined by a binder, that may contain fibers. Such aggregates are not and cannot be an aerogel monolith of the claims. Because of this clear physical distinction between Frank et al.'s compositions and those of the instant claims, it is simply not possible for Frank et al. to anticipate the claims.

The instant rejection thus fails to present a *prima facie* of anticipation. Applicants thus submit that it may be properly withdrawn on this basis alone.

Additionally, Applicants respectfully disagree with the assertion in the instant statement of the rejection equating Frank et al.'s "wadding" to the "lofty fibrous batting" of the instant invention. Applicants submit that the instant claims must be given their broadest reasonable interpretation in light of the claims, and that application of this standard to "lofty fibrous batting" results in an interpretation of the term which is not necessarily equivalent to the use of "wadding" by Frank et al. and the assertion of a dictionary meaning for the term. Simply put, no support has been provided to interpret "lofty fibrous batting" as being equivalent to "wadding" as defined in the cited dictionary or Frank et al. In the absence of such support, Applicants respectfully, but strongly, traverse the mere assertion of an equivalence between a term of the instant application and a different term used by Frank et al. and/or a definition in a dictionary.

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Claims 5, 20, 27-28, 31-32, 38-40, 42-43, and 48 were rejected as allegedly anticipated under 35 U.S.C. § 102(e), or alternatively obvious under 35 U.S.C. § 103(a), based on Frank et al. (US 2003/0077438).

Applicants have carefully reviewed the statement of the rejection as well as the cited reference and respectfully incorporate the arguments presented above. Accordingly, Applicants respectfully submit that no *prima facie* case of anticipation or obviousness has been presented.

As an initial matter, claims 5, 20, 27-28, and 31-32 are all dependent from claims that were rejected as allegedly anticipated by Frank et al. The deficiencies in Frank et al. that demonstrate the lack of a *prima facie* basis for rejection have been discussed above and are hereby incorporated. Accordingly, and because Frank et al. cannot anticipate the claims from which claims 5, 20, 27-28, and 31-32 depend, it is not possible for these dependent claims to have a scope that is anticipated by Frank et al.

With respect to claims 38-40, 42-43, and 48, claim 38 is the independent claim directed to aerogel monoliths containing a lofty fibrous batting from which the other claims depend. As explained above, it is simply not possible for Frank et al. to anticipate claims directed to such subject matter because Frank et al. do not teach or suggest such subject matter. Accordingly, Applicants respectfully submit that Frank et al. do not anticipate these claims.

Moreover, and with respect to claims 27, 28, 32, 38-40, 42-43, and 48, Frank et al. disclose a metallic *covering* layer or film. This is in sharp contrast to the rejected claims where a high thermal conductivity material is present *within* the x-y plane of the "monolithic aerogel composite". Contrary to the allegation in the statement of the rejection, the different position and nature of the Frank et al. *covering* and the material in the claimed invention cannot be equated. Thus these claims are distinct from the disclosure of Frank et al.

With respect to the allegation of obviousness against claims 5, 20, 38 and 40, Applicants respectfully point out that obviousness still requires that each and every limitation of the claims be found in the cited reference(s) or be obvious to an artisan of ordinary skill at the time of the invention. Here, and based on the foregoing discussion, Frank et al. do not disclose

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all the limitations of the claims because they do not disclose or suggest an aerogel monolith containing a lofty fibrous batting as recited in the claims. Moreover, no basis has been provided for how and why the ordinary artisan would modify Frank et al. to arrive at the claimed invention. Accordingly, the claims cannot be rendered obvious in light of Frank et al.

In light of the above, Applicants respectfully submit that no *prima facie* case is present, and this rejection may be properly withdrawn.

Claims 6, 9-10, 12-18, 29-30, and 41 were rejected as allegedly obvious under 35 U.S.C. § 103(a), based on Frank et al. (US 2003/0077438).

Applicants have carefully reviewed the statement of the rejection as well as the cited reference and respectfully incorporate the arguments presented above with respect to the non-obviousness of the claimed invention. Accordingly, Applicants respectfully submit that no *prima facie* case of obviousness has been presented.

The statement of the rejection is entirely premised on the assertion that Frank et al. disclose an aerogel monolith containing a lofty fibrous batting as encompassed by the claims. As explained above, however, this assertion is misplaced because Frank et al. only disclose aggregates that are distinct from aerogel monoliths. Simply put, Frank et al. fail to disclose or suggest all requirements of the claimed invention. Moreover, no basis has been provided as to how and why an artisan of ordinary skill would modify the teachings of Frank et al. to arrive at the claimed invention. In light of these deficiencies, Frank et al. cannot support a *prima facie* case to render the claims obvious. This rejection may thus be properly withdrawn.

Claims 33-36 and 44-47 were rejected as allegedly obvious under 35 U.S.C. § 103(a), based on Frank et al. (US 2003/0077438) in view of Attey et al. (USP 5,544,487).

Applicants have carefully reviewed the statement of the rejection as well as the cited reference and respectfully incorporate the arguments presented above with respect to the non-obviousness of the claimed invention over Frank et al. Accordingly, Applicants respectfully submit that no *prima facie* case of obviousness has been presented.

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Simply put, the deficiencies of Frank et al. have been explained above. Attey et al. fail to remedy any of the deficiencies. Accordingly, it is simply not possible for the combination of these two references to arrive at the claimed invention.

Moreover, the instant rejection is deficient because of a failure to provide an adequate motivation for the combination of the two references. For example, why would the artisan of ordinary skill combine the teachings of Frank et al., directed to an insulating material, with the teachings of Attey et al., directed to a thermo electrical module through which electrical current is intentionally passed? Because of the divergent nature of the technologies involved, the instant rejection appears to be based upon impermissible hindsight reconstruction of the claimed invention. Accordingly, no *prima facie* case of obviousness is present, and this rejection may be properly withdrawn.

Claims 37 and 48 were rejected as allegedly obvious under 35 U.S.C. § 103(a), based on Frank et al. (US 2003/0077438) in view of Nishimura (JP 032135545A).

Applicants have carefully reviewed the statement of the rejection as well as the cited reference and respectfully incorporate the arguments presented above with respect to the non-obviousness of the claimed invention over Frank et al. Accordingly, Applicants respectfully submit that no *prima facie* case of obviousness has been presented.

Once again, Applicants direct attention to the deficiencies of Frank et al., which have been explained above. Nishimura fails to remedy any of the deficiencies. Accordingly, it is simply not possible for the combination of these two references to arrive at the claimed invention.

Additionally, the instant rejection is deficient because of a failure to provide an adequate motivation for the combination of the two references. For example, why would the artisan of ordinary skill combine the teachings of Frank et al., directed to an insulating material, with the teachings of Nishimura, directed to a mat? There is no evidence that the Nishimura mat may be used in combination with the particles, binders, and fibers of Frank et al. Motivation requires more than an assertion that two references may be combined to arrive at a claimed

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invention. Instead, motivation to positively make a combination is required. See the standard set forth at MPEP 2143.01 and the cases cited therein.

Given the lack of an adequate motivation, the instant rejection appears to be based upon impermissible hindsight reconstruction of the claimed invention. Accordingly, no *prima facie* case of obviousness is present, and this rejection may be properly withdrawn.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 858-350-6151.

Respectfully submitted,



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